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Patent Claims

1. Method for the conversion of a cytosine base in a nucleic acid to an uracil base comprising the steps of
 - 5 a) incubating a solution comprising the nucleic acid for a time period of 1.5 to 3.5 hours at a temperature between 70 and 90 °C, whereby the concentration of bisulfite in the solution is between 3 M and 6.25 M and whereby the pH value of the solution is between 5.0 and 6.0 whereby the nucleic acid is deaminated, and
 - 10 b) incubating the solution comprising the deaminated nucleic acid under alkaline conditions whereby the deaminated nucleic acid is desulfonated.
2. Method according to claim 1,
 - 15 characterized in that in step a) the temperature is between 75 and 85 °C.
3. Method according to any of the claims 1 to 2,
 - 20 characterized in that the concentration of bisulfite is between 3.2 M and 6 M.
4. Method according to any of the claims 1 to 3,
 - 25 characterized in that the pH value of the solution is between 5.25 and 5.75.
5. Method according to any of the claims 1 to 4,
 - 30 characterized in that the time period is between 1.75 and 3 hours.
6. Method according to any of the claims 1 to 5,
 - characterized in that the time period is between 2 and 3 hours.

7. Method according to any of the claims 1 to 6,
characterized in that
in step a) the temperature is 80 °C, the concentration of bisulfite is 5 M, the
pH value of the solution is 5.5 and the time period is between 2 and 3 hours.
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8. Use of a solution with a pH value between 5.0 and 6.0 comprising bisulfite in
a concentration between 3 M and 6.25 M at a reaction temperature between
70 and 90 °C and optionally comprising hydroquinone in a reaction wherein
a cytosine base in a nucleic acid is converted to an uracil base in the presence
10 of bisulfite ions...
9. Use according to claim 8 wherein the pH value of the solution is between 5.25
and 5.75 and wherein the concentration of bisulfite is between 3.2 M and 6
M.
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10. Use according to any of the claims 8 to 9 wherein the pH value of the solution
is 5.5 and wherein the concentration of bisulfite is 5 M.
11. Kit comprising a solution with a pH value between 5.0 and 6.0 comprising
20 bisulfite in a concentration between 3 M and 6.25 M and optionally
comprising hydroquinone.
12. Solution with a pH value between 5.4 and 5.6 and comprising bisulfite in a
concentration between 3.5 M and 6.25 M and optionally comprising
25 hydroquinone.
13. Solution according to claim 12 wherein the concentration of bisulfite is
between 3.75 M and 6 M.
- 30 14. Solution according to any of the claims 12 to 13 wherein the pH value of the
solution is 5.5 and wherein the concentration of bisulfite is 5 M.